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CURRENT SERIAL RECORDS

WATER SUPPLY OUTLOOK
and
FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS
for
NEVADA

UNITED STATES DEPARTMENT of AGRICULTURE...SOIL CONSERVATION SERVICE,
and
NEVADA DEPARTMENT of CONSERVATION and NATURAL RESOURCES
DIVISION of WATER RESOURCES

Data included in this report were obtained by the agencies named above in cooperation with the Federal, State and private organizations listed on the last page of this report.

AS OF
FEB. 1, 1964

UNITED STATES DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE

To Recipients of Water Supply Outlook Reports:

The climate of the cultivated and populated areas of the West is characterized by relatively dry summer months. Such precipitation as occurs falls mostly in the winter and early spring months when it is of little immediate benefit to growing crops. Most of this precipitation falls as mountain snow which stays on the ground for months, melting later to sustain streamflow during the period of greatest demand during late spring and summer. Thus, nature provides in mountain snow an imposing water storage facility.

The amount of water stored in mountain snow varies from place to place as well as from year to year and accordingly, so does the runoff of the streams. The best seasonal management of variable western water supplies results from advance estimates of the streamflow.

A snow survey consists of a series of about ten samples taken with specially designed snow sampling equipment along a permanently marked line, up to 1000 feet in length, called a snow course. The use of snow sampling equipment provides snow depth and water equivalent values for each sampling point. The average of these values is reported as the snow survey measurement for a snow course.

Snow surveys are made monthly or semi-monthly beginning in January or February and continue through the snow season until April, May or June. Currently more than 1400 western snow courses are measured each year. These measurements furnish the key data for water supply forecasts.

Streamflow forecasts are obtained by a comparison of total or maximum snow accumulation, as measured by snow water equivalent, to the subsequent spring and summer or snowmelt season runoff over a period of years. The snow water equivalent measured in selected snow courses provides most of the index to the streamflow forecast for the following season. More accurate forecasts are usually obtained when other factors such as soil moisture, base flow and spring precipitation are considered and included in the forecast procedure. Early season forecasts assume average climatic conditions through the snowmelt season.

Listed below are the Federal-State-Private Cooperative Snow Survey and Water Supply Forecast reports available for the West which contain detailed information on snow survey measurements, streamflow forecasts, reservoir storage, soil moisture and other guide data to water management and conservation decisions. Soil Conservation Service Reports may be secured from Water Supply Forecasting Unit, Soil Conservation Service, P.O. Box 2807, Portland, Oregon 97208.

PUBLISHED BY SOIL CONSERVATION SERVICE

<u>REPORTS</u>	<u>ISSUED</u>	<u>LOCATION</u>	<u>COOPERATING WITH</u>
RIVER BASINS			
WESTERN UNITED STATES	MONTHLY (FEB.-MAY)	PORTLAND, OREGON	ALL COOPERATORS
BASIC DATA SUMMARY	OCTOBER 1	PORTLAND, OREGON	ALL COOPERATORS
STATES			
ALASKA	MONTHLY (MAR.-MAY)	PALMER, ALASKA	ALASKA S.C.D.
ARIZONA	SEMI-MONTHLY (JAN. 15 - APR. 1)	PHOENIX, ARIZONA	SALT R. VALLEY WATER USERS ASSOC. ARIZ. AGR. EXP. STATION
COLORADO AND NEW MEXICO	MONTHLY (FEB.-MAY)	FORT COLLINS, COLORADO	COLO. STATE UNIVERSITY COLO. STATE ENGINEER N. MEX. STATE ENGINEER
IDAHO	MONTHLY (JAN.-JUNE)	BOISE, IDAHO	IDAHO STATE RECLAMATION ENGINEER
MONTANA	MONTHLY (JAN.-JUNE)	BOZEMAN, MONTANA	MONT. AGR. EXP. STATION
NEVADA	MONTHLY (JAN.-MAY)	RENO, NEVADA	NEVADA DEPT. OF CONSERVATION AND NATURAL RESOURCES - DIVISION OF WATER RESOURCES
OREGON	MONTHLY (JAN.-JUNE)	PORTLAND, OREGON	OREG. STATE UNIVERSITY OREGON STATE ENGINEER
UTAH	MONTHLY (JAN.-JUNE)	SALT LAKE CITY, UTAH	UTAH STATE ENGINEER
WASHINGTON	MONTHLY (FEB.-JUNE)	SPOKANE, WASHINGTON	WN. STATE DEPT. OF CONSERVATION
WYOMING	MONTHLY (FEB.-JUNE)	CASPER, WYOMING	WYOMING STATE ENGINEER

PUBLISHED BY OTHER AGENCIES

<u>REPORTS</u>	<u>ISSUED</u>	<u>AGENCY</u>
BRITISH COLUMBIA	MONTHLY (FEB.-JUNE)	WATER RESOURCES SERVICE, DEPT. OF LANDS, FOREST AND WATER RESOURCES, PARLIAMENT BLDG., VICTORIA, B.C., CANADA
CALIFORNIA	MONTHLY (FEB.-MAY)	CALIF. DEPT. OF WATER RESOURCES, P.O. BOX 388, SACRAMENTO, CALIF.

WATER SUPPLY OUTLOOK
and
FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS
for
NEVADA

Report prepared by

MANES BARTON

and

ROY E. MALSOR, JR.

SOIL CONSERVATION SERVICE
1479 SOUTH WELLS AVENUE
RENO, NEVADA

FEBRUARY 8, 1964

Issued by

CHARLES W. CLEARY, JR.

STATE CONSERVATIONIST
SOIL CONSERVATION SERVICE
RENO, NEVADA

HUGH A. SHAMBERGER

DIRECTOR
DEPARTMENT OF CONSERVATION AND
NATURAL RESOURCES
CARSON CITY, NEVADA

INDEX TO NEVADA SNOW COURSES (By Basins)

NUMBER	NAME	SEC.	TWP.	RGE.	ELEV.
--------	------	------	------	------	-------

Snake River Basin

SNAKE RIVER					
15H1MA	BEAR CREEK	31	46N	58E	7800
15H4MP*	BIG BENO	30	45N	56E	6700
15H2	FOX CREEK	33	46N	58E	6800
15H13	GOAT CREEK	31	46N	60E	8800
15H5*	GULO CREEK	31	45N	56E	6600
15H15A	HUMMINGBIRD SPRINGS	6	45N	60E	8945
14H1	JACKS CREEK	6	42N	62E	7000
15H14	POLE CREEK RANGER STATION	13	46N	59E	8330
15H18a	RED POINT	15	47N	61E	7940
15H3A	76 CREEK	6	44N	58E	7100
15H19a	STAG MTN.	29	40N	50E	7700

OWYHEE RIVER					
15H4MP	BIG BENO	30	45N	56E	6700
17H2*	BUCKSKIN, LOWER	25	45N	39E	6700
17H1*	BUCKSKIN, UPPER	11	45N	39E	7200
16H6a	COLUMBIA BASIN	31	44N	53E	6650
16H7*	FRY CANYON	31	43N	54E	6700
15H5	GULO CREEK	31	45N	56E	6600
17H4*	GRANITE PEAK	22	44N	39E	7800
16H1M	JACK CREEK, LOWER	18	42N	53E	6800
16H2A	JACK CREEK, UPPER	9	42N	53E	7250
16H4	JACKS PEAK	28	42N	53E	8420
16H5	LAUREL ORAW	20	45N	53E	6700
17G4a	LOUSE CANYON (OREG.)	27	40S	44E	6440
17H3*	MARTIN CREEK	18	44N	40E	6700
15H6MP*	ROOGE FLAT	36	43N	53E	6800
15H19a*	STAG MTN.	29	40N	50E	7700
15H9MP	TAYLOR CANYON	35	39N	53E	6200
16H7A*	TOE JAM	29	40N	50E	7700
15H8*	TREMEWAN RANCH	9	39N	55E	5700

INTERIOR

UPPER HUMBOLOT RIVER					
15J17a	AMERICAN BEAUTY	32	31N	58E	7800
15H1MA	BEAR CREEK	31	46N	58E	7800
15H4MP*	BIG BENO	30	45N	56E	6700
16H6a	COLUMBIA BASIN	31	44N	53E	6650
15J12A	CORRAL CANYON	27	28N	57E	8500
15J1MP	ORSEY BASIN	28	35N	60E	8100
15J3	ORY CREEK	5	34N	60E	6500
15H2*	FOX CREEK	33	46N	58E	6800
15H7	FRY CANYON	31	43N	54E	6700
15H5*	GULO CREEK	31	45N	56E	6600
15J9MP	GREEN MOUNTAIN	23	29N	57E	8000
15J10	HARRISON PASS #1	9	28N	57E	6600
15J11	HARRISON PASS #2	16	28N	57E	7400
16H1M*	JACK CREEK, LOWER	18	42N	53E	6800
16H2A*	JACK CREEK, UPPER	9	42N	53E	7250
16H4*	JACKS PEAK	28	42N	53E	8420
15J4	LAMOILLE #1	15	32N	58E	7100
15J5	LAMOILLE #2	14	32N	58E	7300
15J6M	LAMOILLE #3	24	32N	58E	7700
15J7	LAMOILLE #4	19	32N	59E	8000
15J8P	LAMOILLE #5	31	32N	59E	8700
15J16a	ROBINSON LAKE	23	33N	59E	9200
15H6MP	ROOGE FLAT	36	43N	53E	6800
15J2	RYAN RANCH	1	34N	59E	5800
15H19a*	STAG MTN.	29	40N	50E	7700
15H3A*	76 CREEK	6	44N	58E	7100
15H9MP*	TAYLOR CANYON	35	39N	53E	6200
16H7A*	TOE JAM	29	40N	50E	7700
15H8*	TREMEWAN RANCH	9	39N	55E	5700
15H10P	TROUT CREEK, LOWER	28	37N	61E	6900
15H11A	TROUT CREEK, UPPER	4	36N	61E	8500

LOWER HUMBOLOT RIVER					
17K1	BIG CREEK CAMP GROUND	10	17N	43E	6600
17K2	BIG CREEK MINE	23	17N	43E	7600
17K3	BIG CREEK, UPPER	26	17N	43E	8000
17H2	BUCKSKIN, LOWER	25	45N	39E	6700
17H1	BUCKSKIN, UPPER	11	45N	39E	7200
17J2	GOLCONDA #2	22	35N	39E	6000
17H4	GRANITE PEAK	22	44N	39E	7800
17H5	LAMANCE CREEK	13	42N	38E	6000
17L1	LOWER CORRAL	12	11N	40E	7500
17H3	MARTIN CREEK	18	44N	40E	6700
16H3AP	MIOAS	18	39N	46E	7200
16H7	TOE JAM	29	40N	50E	7700
17L2	UPPER CORRAL	20	11N	41E	8500

EASTERN NEVADA					
14L1	BAKER #1	29	13N	69E	7950
14L2	BAKER #2	30	13N	69E	8950
14L3	BAKER #3	25	13N	68E	9250
14K2	BERRY CREEK	26	17N	65E	9100
14K1	BIRO CREEK	34	19N	65E	7500
15J13	CAVE CREEK	25	27N	57E	7500
15J14	HAGER CANYON	34	27N	57E	8000
15J15	HOLE-IN-MTN	6	35N	61E	7900
14K8	KALAMAZOO CREEK	34	20N	65E	7400
14K3	MURRAY SUMMIT	25	16N	62E	7250
15K1	ROBINSON SUMMIT	34	18N	61E	7600
14K7	SILVER CREEK #2	30	16N	89E	8000
14K5	WARD MOUNTAIN #2	25	15N	62E	7875
15L1*	WHITE RIVER #1	31	13N	59E	7400

CENTRAL GREAT BASIN					
18M2	CAMPITO MTN (CAL.)	19	55	35E	10200
15N2	CLARK CANYON	8	19S	56E	9000
18G6a*	ONIO CREEK (OREG.)	14	41S	34E	6000
18M1	MONTGOMERY PASS	4	1N	33E	7100
18M3a	PINCHOT CREEK	28	1N	33E	9300
18M4a	PIUTE PASS (CAL.)	33	45	33E	11700
15N1	TROUGH SPRINGS	23	18S	55E	8500

NUMBER	NAME	SEC.	TWP.	RGE.	ELEV.
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NORTHERN GREAT BASIN

19H1	BALO MOUNTAIN	17	45N	21E	8720
20H5	BARBER CREEK	23	39N	16E	6500
20H6	CEGAR PASS	12	43N	14E	7100
18H1	OISASTER PEAK	8	47N	34E	6500
20H3a	OISMAL SWAMP (CAL.)	31	48N	22E	7000
20H7	EAGLE PEAK	35	40N	15E	7200
19H3	49-MTN	7	42N	19E	8000
19H2	HAYS CANYON	1	39N	18E	6400
18H2	LEONARD CREEK	13	42N	28E	5900
19H4a	LITTLE BALLY MTN	8	45N	19E	6000
17G5a	OREGON CANYON (OREG.)	9	40S	40E	7240
17H6a	QUINN RIDGE	9	47N	41E	6300
20H4	RESERVATION CREEK	12	46N	15E	5900
18G5a	TROUT CREEK (OREG.)	10	41S	38E	7800

LAKE TAHOE

19L14	OAGGETTS PASS	19	13N	19E	7350
20L5	ECHO SUMMIT (CAL.)	6	11N	18E	7450
19L2	FREEL BENCH (CAL.)	36	12N	18E	7300
19K8	GLENBROOK #2	13	14N	18E	6900
19L3M	HAGANS MEADOW (CAL.)	36	12N	18E	8000
20L4	LAKE LUCILLE (CAL.)	28	12N	17E	8200
19K4M	MARLETTE LAKE	13	15N	18E	8000
19K2*	MT. ROSE	7	17N	19E	9000
20L3	RICHARSONS #2 (CAL.)	6	12N	18E	6500
20L1	RUBICON #1 (CAL.)	6	13N	17E	8100
20L2	RUBICON #2 (CAL.)	6	13N	17E	7500
20K16	TAHOE CITY (CAL.)	8	15N	17E	6250
19L1	UPPER TRUCKEE (CAL.)	21	12N	18E	6400
20K17M	WARD CREEK (CAL.)	21	15N	16E	7000

TRUCKEE RIVER

20K14	BOCA #2 (CAL.)	28	18N	17E	5900
20K11	ONNER LAKE #1 (CAL.)	14	17N	15E	5950
20K21	ONNER PARK #2 (CAL.)	3	16N	16E	6000
20K10*	ONNER SUMMIT (CAL.)	25	17N	14E	6900
20K7*	FOROYCE LAKE (CAL.)	34	18N	13E	6500
20K8	FURNACE FLAT (CAL.)	10	17N	13E	6700
20K4M	INDEPENDENCE CAMP (CAL.)	34	19N	15E	7000
20K3	INDEPENDENCE CREEK (CAL.)	14	19N	15E	6500
20K5	INDEPENDENCE LAKE (CAL.)	9	18N	15E	8450
19K3	LITTLE VALLEY	17	16N	19E	6300
19K2	MT. ROSE	7	17N	19E	9000
20K6	SAGE HEN CREEK (CAL.)	7	18N	16E	6500
20K19	SOUAW VALLEY #2 (CAL.)	6	15N	16E	7500
20K16*	TAHOE CITY (CAL.)	6	15N	17E	6250
20K13M	TRUCKEE #2 (CAL.)	22	17N	16E	6400
20K17M*	WARD CREEK (CAL.)	21	15N	16E	7000
20K2	WEBBER LAKE (CAL.)	20	19N	14E	8800
20K1*	WEBBER PEAK (CAL.)	30	19N	14E	8000

CARSON RIVER

19L5	BLUE LAKES (CAL.)	30	9N	19E	8000
19L4	CARSON PASS, UPPER (CAL.)	22	10N	18E	8600
19K5	CLEAR CREEK	6	14N	19E	7300
19L18	EBBETTS PASS (CAL.)	17	8N	20E	8700
19L6a	POISON FLAT (CAL.)	25	8N	21E	7900
19L16a	UPPER FISH VALLEY (CAL.)	18	7N	22E	8050
19L17	WET MEADOWS LAKE (CAL.)	26	9N	19E	8100

WALKER RIVER

19L11	BUCKEYE FORKS (CAL.)	20	4N	23E	8500
19L10	BUCKEYE ROUGHS (CAL.)	15	4N	23E	7900
19L12A	CENTER MOUNTAIN (CAL.)	4	3N	23E	9400
18L1	LAPON MEADOW	36	8N	28E	9000
19L8	LEAVITT MEADOWS (CAL.)	4	5N	22E	7200
19L17a	LOBDELL LAKE	20	7N	24E	9200
18L2	MT. GRANT	23	8N	28E	9000
19L7M	SONORA PASS (CAL.)	1	5N	21E	8800
19M1*	TIOGA PASS (CAL.)	30	1N	25E	8900
19L13M	VIRGINIA LAKES (CAL.)	5	2N	25E	9500
19L9	WILLOW FLAT (CAL.)	21	5N	23E	8250

COLORADO

LOWER COLORADO RIVER

15N5	KYLE CANYON	26	19S	56E	8200
15N4	LEE CANYON #1	10	19S	56E	8300
15N3	LEE CANYON #2	9	19S	56E	9000
14M1	MATHEW CANYON	11	5S	70E	6000
14M2	PINE CANYON	11	6S	69E	6200
15N7	RAINBOW CANYON #2	6	20S	57E	8100
15L1	WHITE RIVER #1	31	13N	59E	7400

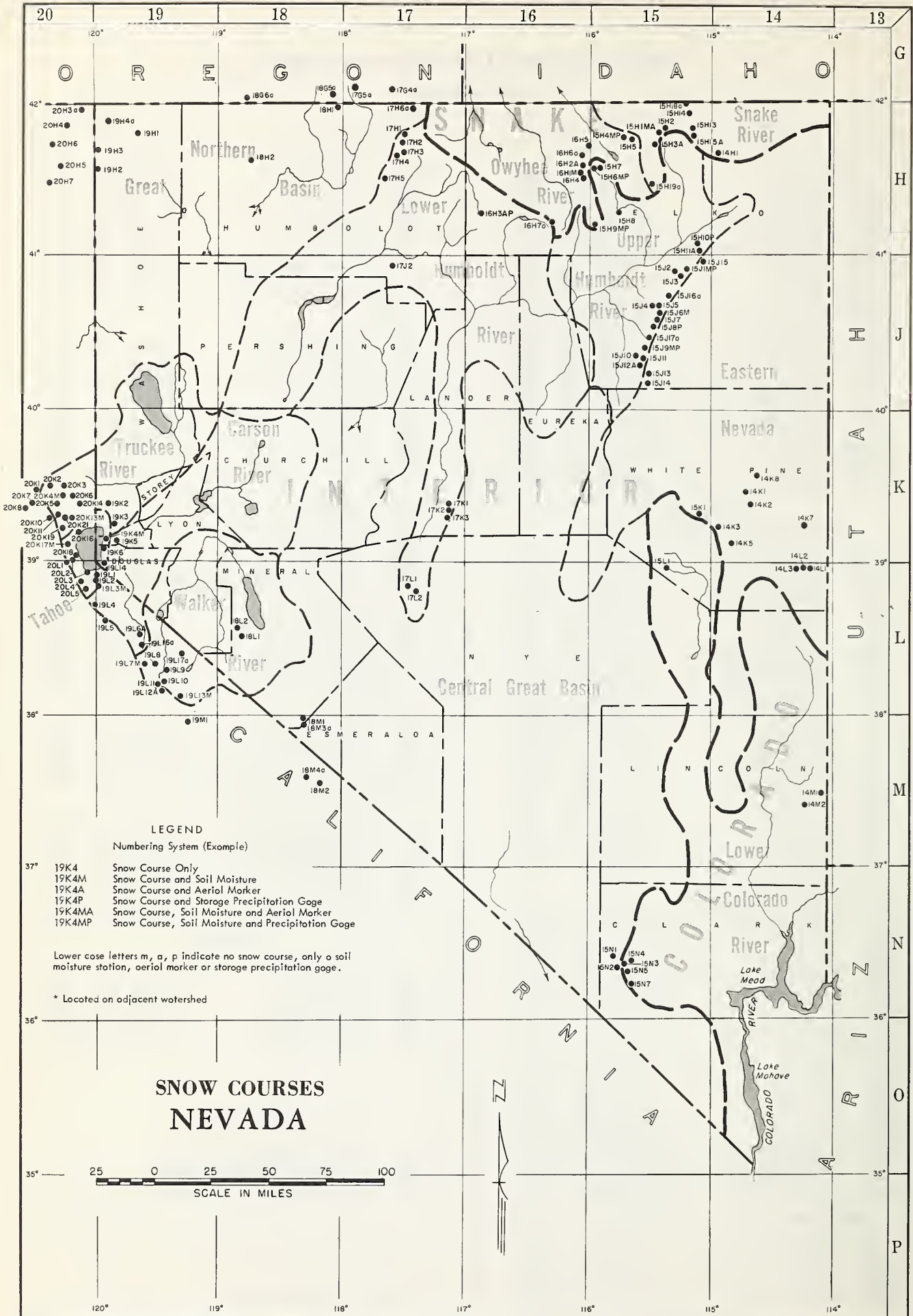
LEGEND

NUMBERING SYSTEM (EXAMPLE)

19K4	SNOW COURSE ONLY
19K4M	SNOW COURSE AND SOIL MOISTURE
19K4A	SNOW COURSE AND AERIAL MARKER
19K4P	SNOW COURSE AND STORAGE PRECIPITATION GAGE
19K4MA	SNOW COURSE, SOIL MOISTURE AND AERIAL MARKER
19K4MP	SNOW COURSE, SOIL MOISTURE AND PRECIPITATION GAGE

LOWER CASE LETTERS m, a, p, INDICATE NO SNOW COURSE, ONLY A SOIL MOISTURE STATION, AERIAL MARKER OR STORAGE PRECIPITATION GAGE.

* LOCATED ON ADJACENT WATERSHED



WATER SUPPLY OUTLOOK
FOR NEVADA
February 1, 1964

*
* The 1964 irrigation season water supply outlook is good in *
* western and northern Nevada, particularly for water users served *
* in part from reservoirs. Mountain snow water accumulation to *
* date has been near normal to normal. Reservoir storage is *
* 93 percent of the February 1 average. Limited data indicates *
* that the snowpack in south-central and southern Nevada is below *
* normal. Mountain soil moisture is good in northern and western *
* Nevada. *
*

The storm system which moved through Nevada during January 16-23 deposited heavy amounts of snow in the mountains of western and northern Nevada. Snowfall from this storm decreased from north to south with only small quantities falling in Esmeralda, Nye, Lincoln and Clark counties.

February 1 snow surveys were taken at 60 snow courses and 25 aerial snow depth markers in or adjacent to Nevada. These measurements indicate that the water content of the February 1, 1964 snowpack is 82 percent of the February 1 average in the Tahoe-Truckee basin, 83 percent average in the Carson basin, 70 percent average in the Walker and 85 percent average in the Humboldt basin. Several snow courses in the Snake, Owyhee and Upper Humboldt basins were 110 to 150 percent of their February 1 averages.

Assuming that precipitation and temperature will be near average from the present time until the end of the forecast period; April-July runoff forecasts for a selected group of streams are as follows:

Stream	April-July, Streamflow Thousand Acre Feet				
	15-Yr.		1964 as	Measured	
	Forecast	Av.	% of	Runoff	
	1964	1943-57	15-Yr Av.	1963	1962
Owyhee River nr. Gold Cr., Nev.*	26	29	90	15	29
Owyhee River nr. Owyhee, Nev.*	78	86	91	70	85
Humboldt River at Palisade, Nev.	165	225	73	216	267
West Walker below E. Fork nr.					
Coleville, California	120	148	81	173	155
Virgin River at Virgin, Utah**	25	44	57	18	57

* Corrected for storage in Wild Horse Reservoir.

**April-June forecast furnished by SCS, Salt Lake City, Utah

Reservoirs continued to show improvement during February. The stored water supply in Wild Horse, Lahontan, Topaz and Bridgeport reservoirs is above average. Rye Patch currently holds 75,000 acre feet which is 79 percent of average. Lake Tahoe held 379,000 acre feet (82% avg.) on February 1, 1964. This is 202,000 acre feet more than a year ago this date.

Mountain soil moisture in the northern half of Nevada is good due to above average fall rainfall. Very little snow melt water will be required to prime these soils.

Chapter 10
Mathematics

The first part of the chapter discusses the importance of mathematics in the study of science. It then goes on to discuss the various branches of mathematics, including algebra, geometry, and calculus. The chapter also includes a section on the history of mathematics, which discusses the contributions of various mathematicians throughout the centuries. Finally, the chapter concludes with a discussion of the applications of mathematics in the real world, such as in engineering, physics, and economics.

The second part of the chapter discusses the various methods used in mathematics to solve problems. It includes a section on the use of logic and reasoning, which discusses the importance of these skills in the study of mathematics. It also includes a section on the use of proof, which discusses the various methods used to prove mathematical statements. Finally, the chapter concludes with a discussion of the use of computers in mathematics, which discusses the various ways in which computers are used to solve mathematical problems.

The third part of the chapter discusses the various applications of mathematics in the real world. It includes a section on the use of mathematics in engineering, which discusses the various ways in which mathematics is used to design and build structures. It also includes a section on the use of mathematics in physics, which discusses the various ways in which mathematics is used to describe the physical world. Finally, the chapter concludes with a discussion of the use of mathematics in economics, which discusses the various ways in which mathematics is used to analyze economic data.

NEVADA

STATUS OF RESERVOIR STORAGE

FEBRUARY 1 1964

BASIN AND STREAM	RESERVOIR	USABLE CAPACITY (1000 AF)	USABLE STORAGE - 1000 ACRE FEET			
			1964	1963	1962	FEBRUARY 1 15-YR. AVE. 1943-57
Owyhee	Wild Horse	33	25	18	9	12
Lower Humboldt	Rye Patch	179	75	75	6	95
Colorado	Mohave	1,810	1,696	1,682	1,680	1,427*
Colorado	Mead	27,217	15,448	22,676	17,901	17,464
Tahoe	Tahoe	732	379	175	0	461
Truckee	Boca	41	8	26	1	10
Truckee	Prosser**	29	10	11	Storage began Jan. 30, 1963	
Carson	Lahontan	286	213	193	35	198
West Walker	Topaz	59	46	35	10	36
East Walker	Bridgeport	42	38	36	12	30

* 1950-57

** Flood control use allocation of 20,000 a.f. between Nov. 1 and Apr. 10

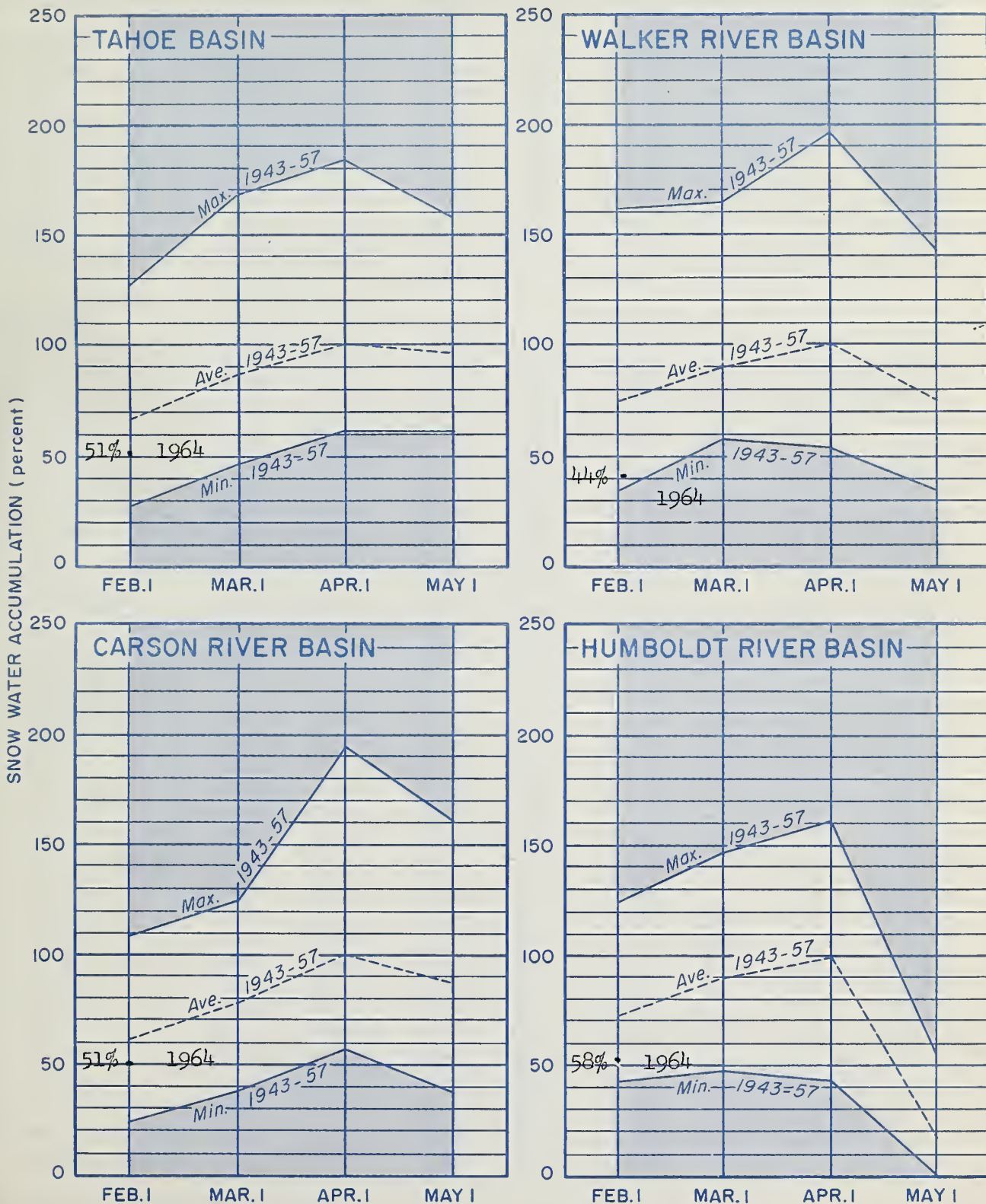
TOTAL RESERVOIR STORAGE

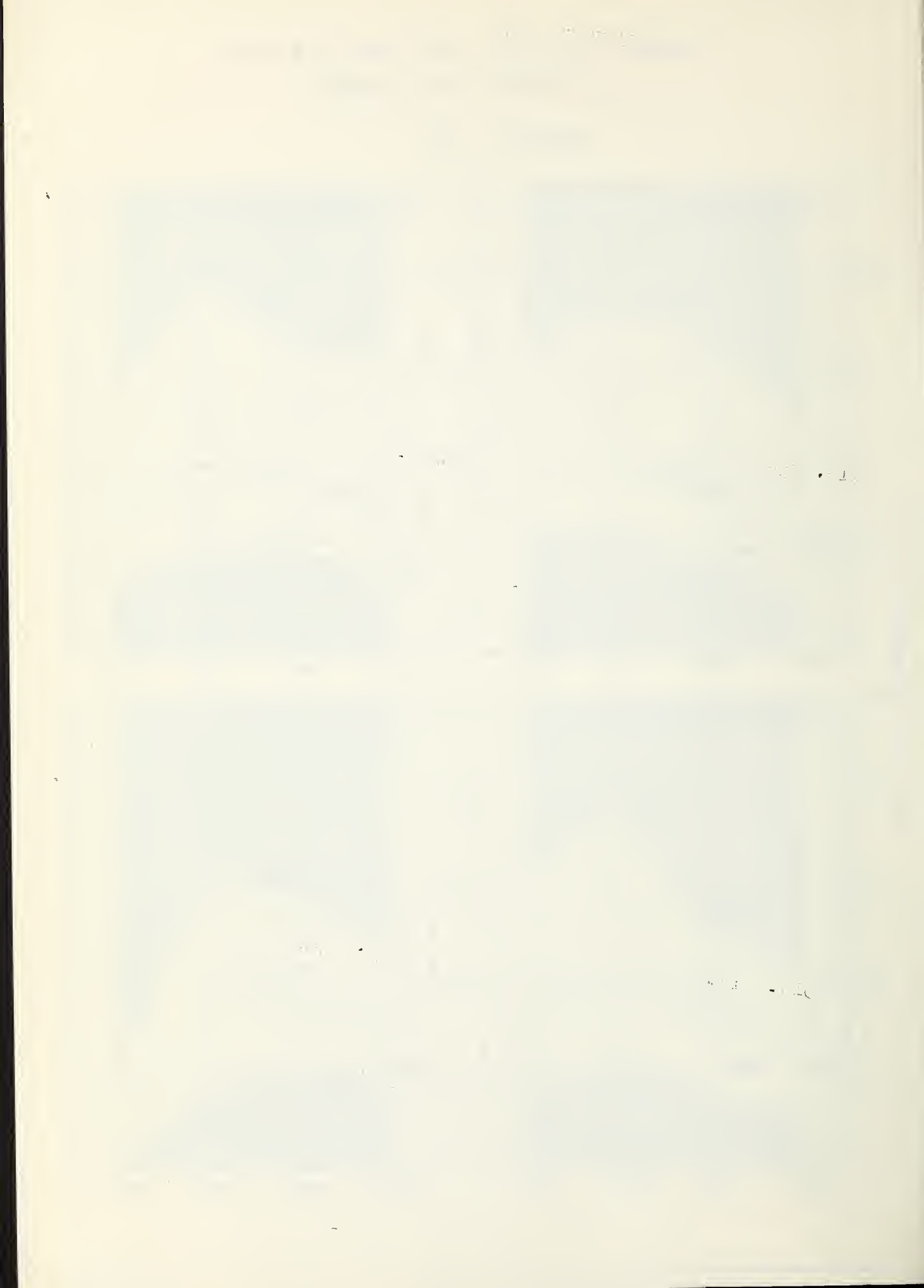
Developed from Wild Horse, Rye Patch, Tahoe, Boca, Lahontan, Topaz
and Bridgeport Reservoirs in 1000's Acre Feet

MONTH							AVERAGE
	1958-59	1959-60	1960-61	1961-62	1962-63	1963-64	1943-57
October 1	985	489	263	65	345	707	732
January 1	890	367	206	57	419	756	787
February 1	947	398	218	73	558	784	842
March 1	1,038	494	254	210	696		877
April 1	1,066	592	285	318	769		923
May 1	1,036	632	300	499	844		971
TOTAL USABLE CAPACITY		1,372					

SNOW WATER ACCUMULATION in NEVADA by BASIN

FEBRUARY 1, 1964





NEVADA SNOW SURVEYS FEBRUARY 1 1964

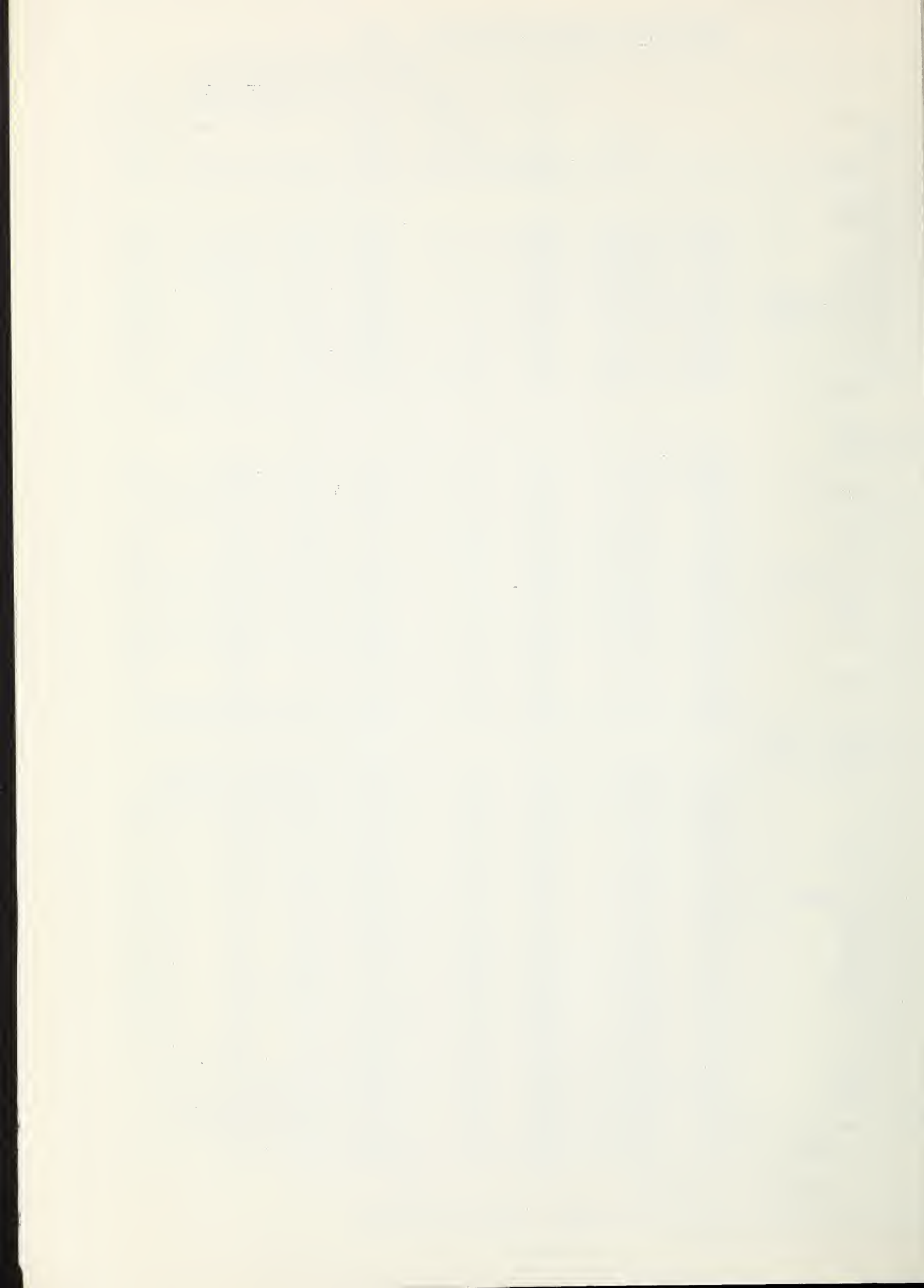
SNOW COVER MEASUREMENTS

DRAINAGE BASIN AND SNOW COURSE	No.	Elev. (Ft.)	1964 : P a s t R e c o r d					
			Date : Survey:	Snow : (In.):	Water : (In.):	Water Content : 1963	Water Content (In) 1962	(In) Ave.
<u>SNAKE RIVER</u>								
Bear Creek	15H1MA	8145	1/29	39	11.5 ^e	4.5 ^e	14.3 ^e	12.1*
+Big Bend	15H4M	6700	1/28	36	8.3	T	5.0	6.9*
Goat Creek	15H13A	8800	1/29	37	10.1 ^e	2.8 ^e	7.8 ^e	10.6*
+Gold Creek	15H5	6600	1/28	29	7.0	0.0	3.4	4.1*
Hummingbird Springs	15H15A	8870	1/29	45	13.3 ^e	5.4 ^e	10.9 ^e	12.7*
Pole Creek R. S.	15H14	8330	1/28	45	13.3	6.8	11.8	10.7*
Red Point	15H18a	7940	1/29	39	11.5 ^e	1.8 ^e	5.3 ^e	--
76-Creek	15H3A	7100	2/2	27	6.8 ^e	T e	6.2 ^e	8.3*
Stag Mountain	15H19a	7700	2/2	12	2.9 ^e	New Aerial Marker		
<u>OWYHEE RIVER</u>								
+Bear Creek	15H1MA	8145	1/29	39	11.5 ^e	4.5 ^e	14.3 ^e	12.1*
Big Bend	15H4M	6700	1/28	36	8.3	T	5.0	6.9*
Columbia Basin	16H6a	6650	2/2	40	8.8 ^e	New Aerial Marker		
+Fry Canyon	15H7	6700	1/28	27	5.5	T	3.2	6.5*
Gold Creek	15H5	6600	1/28	29	7.0	0.0	3.4	4.1*
+Granite Peak	17H4	7800	1/30	22	6.2	6.8	5.6	8.1*
Jack Creek, Upper	16H2A	7250	2/2	12	2.3 ^e	T	8.1	6.5*
Laurel Draw	16H5	6700	1/30	30	6.8	0.0	4.0	--
+Martin Creek	17H3	6700	1/30	24	5.5	T	6.0	5.7*
+Rodeo Flat	15H6M	6800	1/28	21	4.8	T	3.0	6.4*
+76-Creek	15H3A	7100	2/2	27	6.8 ^e	T e	6.2 ^e	8.3*
Taylor Canyon	15H9M	6200	1/27	20	4.3	T	2.5	4.1*
+Toe Jam	16H7a	7700	2/2	24	5.5 ^e	New Aerial Marker		
+Tremewan Ranch	15H8	5700	1/29	13	3.2	0.0	0.9	1.9*
<u>UPPER HUMBOLDT RIVER</u>								
American Beauty	15J17a	7800	1/30	21	5.4 ^e	New Aerial Marker		
+Bear Creek	15H1MA	8145	1/29	39	11.5 ^e	4.5 ^e	14.3 ^e	12.1*
+Big Bend	15H4M	6700	1/28	36	8.3	T	5.0	6.9*
Corral Canyon	15J12A	8500	1/30	25	6.5 ^e	--	--	--
Fry Canyon	15H7	6700	1/28	27	5.5	T	3.2	6.5*
+Gold Creek	15H5	6600	1/28	29	7.0	0.0	3.4	4.1*
+Jack Creek, Upper	16H2A	7250	2/2	12	2.3 ^e	T	8.1	6.5*
Lamoille #1	15J4	7100	1/29	27	6.1	1.6	7.5	6.6*
Lamoille #2	15J5	7200	1/29	24	5.5	2.4	7.2	6.9*
Lamoille #3	15J6	7700	1/29	28	7.0	3.8	8.7	8.9*
Lamoille #4	15J7	8000	1/29	34	9.3	5.4	13.0	12.9*
Lamoille #5	15J8	8700	1/29	49	12.6	9.1	19.6	19.2*
Rodeo Flat	15H6M	6800	1/28	21	4.8	T	3.0	6.4*
+76-Creek	15H3A	7100	2/2	12	2.3 ^e	T e	6.2 ^e	8.3*
+Stag Mountain	15H19a	7700	2/2	12	2.9 ^e	New Aerial Marker		
+Taylor Canyon	15H9M	6200	1/27	20	4.3	T	2.5	4.1*
+Toe Jam	16H7a	7700	2/2	24	5.5 ^e	New Aerial Marker		
+Tremewan Ranch	15H8	5700	1/29	13	3.2	0.0	0.9	1.9*
Trout Creek, Upper	15H11A	8500	1/30	45	11.7 ^e	--	--	--

+ Located on adjacent drainage

e Aerial snow depth gage reading; water content estimated.

* 1943-57 adjusted average.



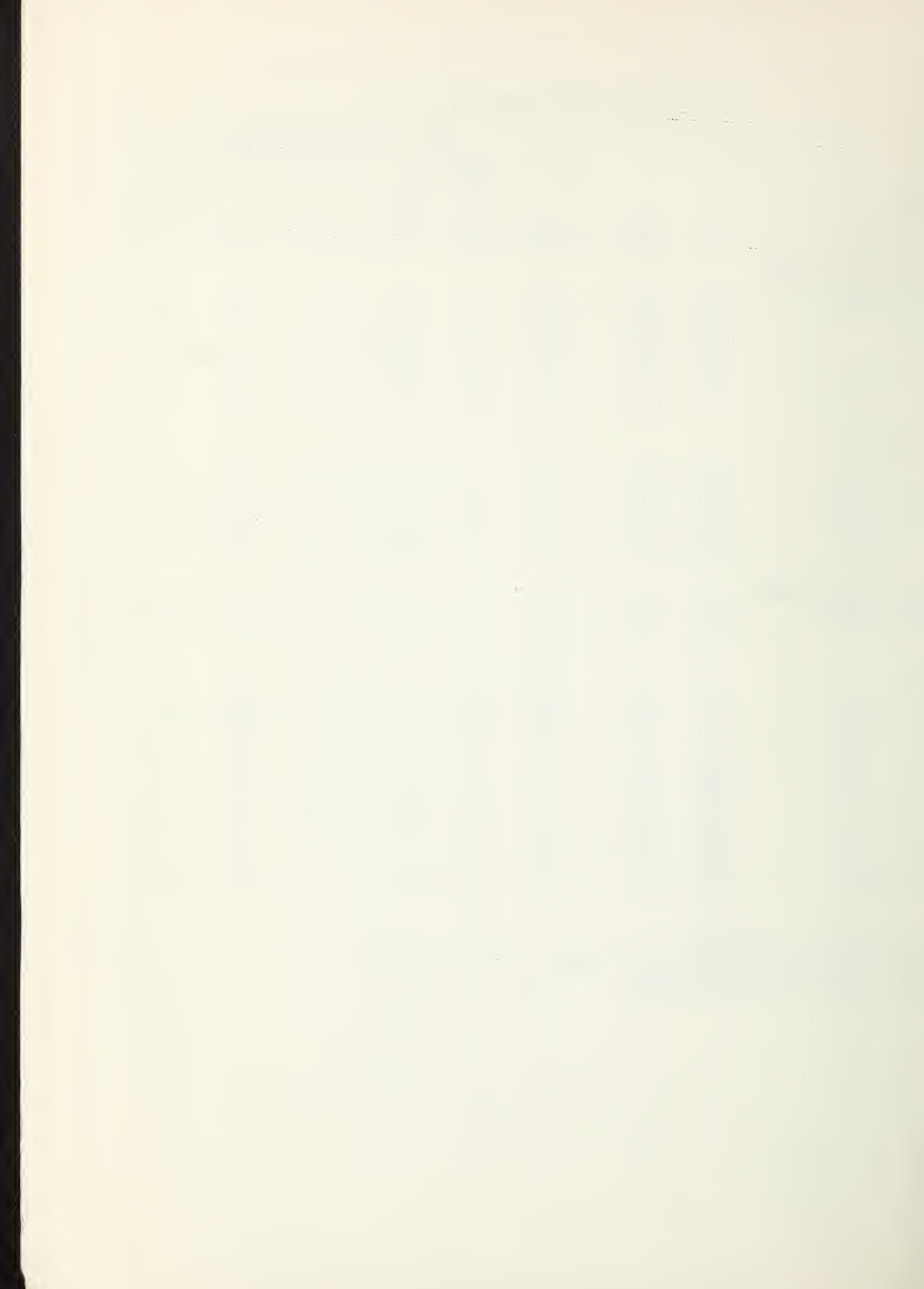
NEVADA SNOW SURVEYS FEBRUARY 1, 1964

DRAINAGE BASIN AND SNOW COURSE			SNOW COVER MEASUREMENTS					
			1964			: P a s t R e c o r d		
			Date :	Snow :	Water :	Water Content (In.)		
			of :	Depth :	Content :	1943-57		
No.	Elev. (Ft.)	Survey:	(In.):	(In.):	(In.):	1963	1962	Ave.
<u>LOWER HUMBOLDT RIVER</u>								
Granite Peak	17H4	7800	1/30	22	6.2	6.8	5.6	8.1*
Martin Creek	17H3	6700	1/30	24	5.5	T	6.0	5.7*
Midas	16H3A	7200	2/2	12	3.0 ^e	--	--	--
Toe Jam	16H7a	7700	2/2	24	5.5 ^e	New Aerial Marker		
Lower Corral	17L2	7500	2/1	5	0.9	--	2.5	--
Upper Corral	17L1	8500	2/1	12	3.0	--	4.3	--
<u>QUINN RIVER</u>								
Denio Creek	18G6a	6000	1/31	3	0.7 ^e	0.0	0.8 ^e	--
Louse Canyon	17G4a	6440	1/31	6	1.4 ^e	T	0.8 ^e	--
Oregon Canyon	17G5a	7240	1/31	20	4.8 ^e	T	3.9 ^e	--
Quinn Ridge	17H6a	6300	1/31	7	1.7 ^e	T	0.8 ^e	--
Trout Creek	18G3a	7800	1/31	12	2.9 ^e	2.0 ^e	3.4 ^e	--
<u>LOWER COLORADO RIVER</u>								
Mathew Canyon	14M1	6000	1/31	2	0.4	--	9.1	2.6*
Pine Canyon	14M2	6200	1/31	5	1.7	--	10.3	2.9*
<u>TAHOE</u>								
Daggetts Pass	19L14	7350	1/28	20	5.0	T	3.8	10.1*
Echo Summit	20L5	7500	1/31	69	19.9	7.1	15.9 ^b	26.6
Freel Bench	19L2	7300	1/29	30	8.3	T	5.2	10.0*
Glenbrook #2	19K6	6900	2/1	24	6.2	0.6	4.2	9.1*
Hagans Meadow	19L3	8000	1/29	36	10.5	2.4	6.8	12.2*
Marlette Lake	19K4	8000	1/28	37	9.9	1.6	6.9	14.1*
Richardsons #2	20L3	6500	2/1	40	10.2	1.0	7.6	13.3*
Tahoe City	20K16	6250	1/30	32	9.9	T	3.8	9.6*
Upper Truckee	19L1	6400	1/29	27	7.6	T	5.0	9.5*
Ward Creek	20K17	7000	1/30	79	25.6	T	17.8	26.9*

* 1943-57 adjusted average.

e Aerial snow depth gage reading; water content estimated.

b Water content partly estimated.



NEVADA SNOW SURVEYS FEBRUARY 1, 1964

DRAINAGE BASIN AND SNOW COURSE			SNOW COVER MEASUREMENTS					
			1964		: P a s t R e c o r d			
			Date : Survey :	Snow : (In.):	Water : (In.):	Water Content (In)	1943-57 Ave.	
No.	Elev. (Ft.)					1963	1962	
<u>TRUCKEE RIVER</u>								
Boca #2	20K14	5900	1/31	21	4.6	0.0	2.6	6.5*
Donner Park #2	20K21	6000	1/30	46	12.1	0.0	9.1	--
+Donner Summit	20K10	6900	1/29	79	23.6	T	15.1	25.7
+Fordyce Lake	20K7	6500	1/30	86	25.6	T	19.5	25.3*
+Furnace Flat	20K8	6600	1/30	95	30.2	T	19.5	28.8*
Sage Hen Creek	20K6	6500	1/31	45	12.0	0.0	8.0	13.4*
Squaw Valley #2	20K19	7500	2/2	86	27.6	T	19.9	--
Tahoe City	20K16	6250	1/30	32	9.9	T	3.8	9.6*
Truckee #2	20K13	6400	1/31	39	10.0	0.0	7.0	12.9*
+Ward Creek	20K17	7000	1/30	79	25.6	T	17.8	26.9*
<u>CARSON RIVER</u>								
Carson Pass (Upper)	19L4	8600	1/26	63	18.6	2.8	13.6	22.4
Ebbetts Pass	19L19a	8700	1/27	63	17.6 ^e	New	aerial marker	
Wet Meadow Lake	19L18a	8100	1/27	45	12.6 ^e	New	aerial marker	
Poison Flat	19L6A	7900	1/27	24	6.7 ^e	1.5 ^e	5.8 ^e	--
Upper Fish Valley	19L16a	8050	1/27	18	5.0 ^e	3.0 ^e	5.8 ^e	--
<u>WALKER RIVER</u>								
Center Mountain	19L12A	9400	1/27	45	11.7 ^e	6.5 ^e	13.3 ^e	--
Lobdell Lake	19L17a	9200	1/27	31	8.1 ^e	New	aerial marker	
Sonora Pass	19L7	8800	1/27	42	11.7	1.9	10.4	14.5*
Tioga Pass	19M1	9900	Report delayed		--	--	10.9	18.6*
Virginia Lakes	19L13	9500	1/27	30	7.6	0.4	8.7	11.8*
<u>WHITE MOUNTAINS</u>								
Campito Mtn.	18M2	10200	Report delayed			5.2	2.5	--
Montgomery Pass	18M1	7100	Report delayed			0.0	1.4	--
Pinchot Creek	18M3a	9300	1/27	2	0.4 ^e	0.0	T ^e	--
Piute Pass	18M4a	11700	1/27	3	0.6 ^e	3.0 ^e	T ^e	--
<u>NORTHERN GREAT BASIN (Surprise Valley)</u>								
Barber Creek	20H2	6500	1/30	32	8.6	1.4	7.0	--
Cedar Pass	20H6	7100	1/31	45	8.4	0.6	6.0	11.5*
Dismal Swamp	20H3a	7000	1/26	45	10.8 ^e	1.5 ^e	9.9 ^e	--
49-Mountain	19H3	6000	1/31	16	3.7	0.0	3.1	--
Hays Canyon	19H2	6400	1/30	16	4.5	0.0	2.5	--
Little Bally Mtn.	19H4a	6000	1/26	10	2.4 ^e	0.0	3.6 ^e	--
Reservation Creek	20H1	5900	1/30	40	10.8	1.0	8.3	--

+ Located on adjacent drainage.

^e Aerial snow depth gage reading; water content estimated.

* 1943-57 adjusted average.

Agencies Cooperating in Collecting Data Contained in this Bulletin

FEDERAL

- Agricultural Research Service
- Army
- Bureau of Reclamation
- Fish and Wildlife Service
- Forest Service
- Geological Survey
- Navy
- Soil Conservation Service
- Weather Bureau

STATE

- California Cooperative Snow Surveys
- California Department of Water Resources
- Colorado River Commission of Nevada
- Nevada Association of Soil Conservation Districts
- Nevada Cooperative Snow Surveys
- Nevada Department of Conservation & Natural Resources
 - Division of Water Resources
 - Nevada State Forester-Firewarden
- Oregon Cooperative Snow Surveys
- University of Nevada
- White Mountain Research Station, Univ. of California

PRIVATE

- Amalgamated Sugar Company
- Kennecott Copper Corporation
- Nevada Irrigation District
- Owyhee Project North Board of Control
- Owyhee Project South Board of Control
- Pacific Gas & Electric Company
- Pershing County Water Conservation District
- Sierra Pacific Power Company
- Squaw Valley Development Company
- Truckee-Carson Irrigation District
- Virginia City Water Company
- Walker River Irrigation District
- Washoe County Water Conservation District

Other organizations and individuals furnish valuable information for the snow survey reports. Their Cooperation is gratefully acknowledged.

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*"The Conservation of Water begins
with the Snow Survey"*

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